



AGREVO-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Phuong Bui
Group Art Unit : 1638
Applicants : B. Muller-Rober et al.
Serial No. : 08/702,718
Filed : March 19, 1997
For : PROCESSES FOR INHIBITING AND FOR
INDUCING FLOWER FORMATION IN PLANTS

New York, New York
November 2, 2000

Hon. Commissioner for Patents
Washington, D.C. 20231

RESPONSE TO NOTICE OF NON-RESPONSIVE AMENDMENT

Sir:

This is in response to the October 3, 2000 Notice of Non-responsive
Amendment in the above-identified application. A response is due on or before
November 3, 2000. Therefore, this response is timely filed.

The Examiner acknowledges receipt of applicants' Amendment and
Response, the Information Disclosure Statement, and the Statement Verifying
Unrestricted Access to Deposited Biological Material Upon Grant of Patent ("Deposit

Letter"), all of which were filed July 7, 2000. The Examiner acknowledges applicants' cancellation of all previously submitted claims except claim 71 and states that new claims 74-120 have been entered.

The Examiner states that applicants did not provide any clear and specific indication as to which claims read on the elected invention and species. The Examiner further states that applicants are required in response to the Notice to provide a clear indication of how the new claims correspond to the inventions and species as set forth in the June 7, 1999 Office Action.

Applicants provide herewith a description of the relationship between the currently pending claims and the canceled claims that were the subject of the June 7, 1999 Office Action. Further, applicants provide a listing of all claims readable on both the elected and non-elected inventions and species as defined in the June 7, 1999 Office Action.

As stated in applicants' July 7, 2000 Response, and as admitted by the Examiner, claims 46, 60, and 63 were not examined even though these claims were directed to the elected invention Group I and are directed to the elected species VI, i.e., DNA encoding *S. tuberosum* citrate synthase in antisense orientation. The subject matter previously recited in claim 46 is now recited in added claims 74 and 88. Material recited in claims 60 and 63 is now recited in added claims 117 and 105, respectively.

For the convenience of the Examiner, applicants provide the following table showing the general correspondence between the pending added claims and the canceled claims*:

Pending Claim	Canceled Claim(s)	Pending Claim	Canceled Claim(s)	Pending Claim	Canceled Claim(s)
74	46-51	90	48	106	64
75	52	91	49	107	65
76**	17	92	51	108	66
77	18	93	50	109	67
78	19	94	52	110	68
79	—***	95	56	111	69-70
80	—	96	—	112	21
81	56	97	1	113	22
82	—	98	58	114	23
83	—	99	58	115	72
84	61	100	1	116	28
85	43	101	5	117	60
86	44	102	6	✓ 118	—
87	45	103	7	✓ 119	69-70
88	46	104	62	✓ 120	69-70
89	47	105	63		

* The pending claims may not be identical in scope or subject matter to their corresponding canceled claims.

** The text of this claim is identical to the corresponding canceled claim.

*** The symbol “—“ is used to indicate that no previously submitted claim directly corresponds to the currently pending claim. Support for the claims so marked is detailed in applicants' July 7, 2000 Amendment and Response.

Claims 71, 74-101, 104-112, and 115-120 read on elected Group I. Claims 102, 103, and 113, as well as claims 115-117, insofar as they refer to claim 113, read on Group III. Claim 114, as well as claims 115-117, insofar as they read on claim 114, read on Group IV. However, for the reasons detailed in applicants' July 7, 2000 Amendment and Response, applicants request that the Examiner withdraw the restriction/election requirement and rejoin Groups I, III and IV. Thus, all the pending claims would be rejoined.

As discussed in the July 7, 2000 Amendment and Response, the Examiner has allowed claims 71 and 17 (now claim 76). Applicants request that the species election requirement be withdrawn at least for those claims that are drawn to "additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim." See the June 7, 1999 Office Action, pg. 4, lines 14-16. Claims 71 and 76 are drawn to a recombinant DNA molecule and vector, respectively, comprising a promoter functional in plants and a DNA sequence coding for citrate synthase, wherein the DNA sequence is fused to the promoter in antisense orientation. These claims are generic and therefore, as stated by the Examiner, all species claims that depend from these claims or include all the limitations of these allowed claims should be examined. Claims 74-75, 77-78, 81-83 and 118-120 depend from either or both of claims 71 and 76, and thus all species encompassed by these claims should be examined. Further, claims 104-110 include all the limitations of the allowed claims and thus all species encompassed by these claims should be examined as well.

With regard to the species election for Group I, applicants provide the following correspondence between the currently pending claims and the species defined in the June 7, 1999 Office Action:

Species I: 84-85, 88, 91, 94-101, 111-112*

Species II: 84, 86, 90, 93-101, 111-112*

Species III: 84, 87, 89, 92, 94-101, 111-112*

Species VI: 71, 74-77, 79-85, 88, 91, 94-101, 104-105, 108, 111-112, and 115-120;

Species VII: 71, 74-76, 78-84, 86, 90, 93-101, 104, 107, 110-112, and 115-120; and

Species VIII: 71, 74-76, 79-84, 87, 89, 92, 94-101, 104, 106, 109, 111-112, and 115-120.

Applicants note that claims 102-103, 113 and 115-117, which read on Group III, and claims 113-117, which read on Group IV, are generic.

* Applicants note that the claims of Species I-III recite transgenic plants with reduced citrate synthase activity and are thus in Groups I, III and IV. These claims recite a nucleic acid that may be in either sense or anti-sense orientation, e.g., a nucleic acid in sense orientation may reduce citrate synthase activity by cosuppression while a nucleic acid in anti-sense orientation may reduce citrate synthase activity by anti-sense inhibition. Therefore, although these claims fall in elected Group I, they cannot be assigned to any one of the species as defined for Groups I and IV in the June 7, 1999 Office Action. See page 4 of June 7, 1999 Office Action. Similarly, Group III, drawn to storage organs of plants having reduced citrate synthase activity, which was assigned to species I-V in the June 7, 1999 Office Action, also reads on species VI-XI. See, e.g., claim 102.



Conclusion

Applicants request consideration of the July 7, 2000 Amendment and Response and allowance of claims 71 and 74-120. Applicants further request that Examiner contact the undersigned if there are additional questions regarding the elected group and/or species of the currently pending claims.

Respectfully submitted,

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Signature of Person Signing